POLITECNICO
MILANO 1863

Computer Science and Engineering

Code Inspection

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1 Classes Assigned

We have been assigned two classes :

- ProductionRun.java
- ViewerServletRequest.java

The namespace patten is :

```
../apache-ofbiz-16.11.01/applications/manufacturing/src/main/java/org/apache/ofbiz
/manufacturing/jobshopmgt/ProductionRun.java
```

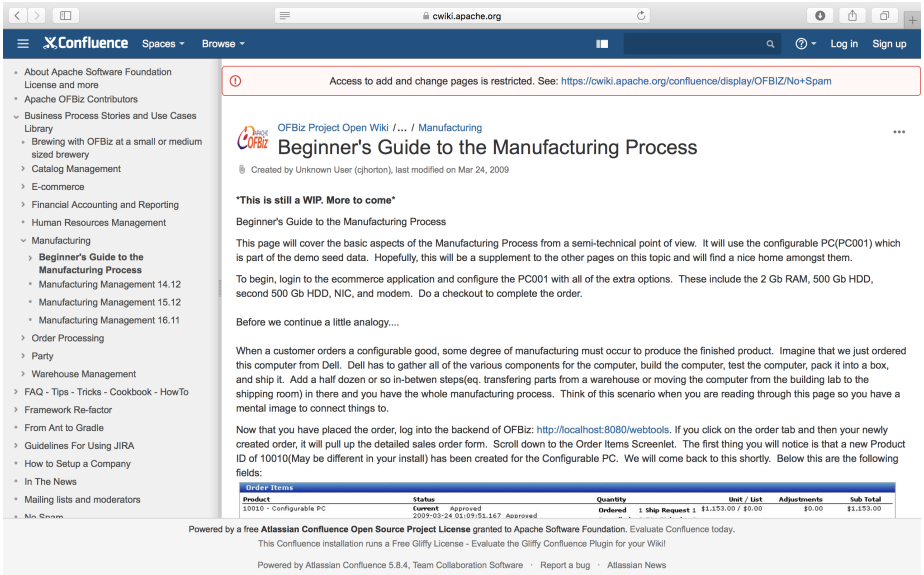
```
../apache-ofbiz-16.11.01/specialpurpose/birt/src/main/java/org/apache/ofbiz/birt
/report/servlet/ViewerServletRequest.java
```

2 Functional Role

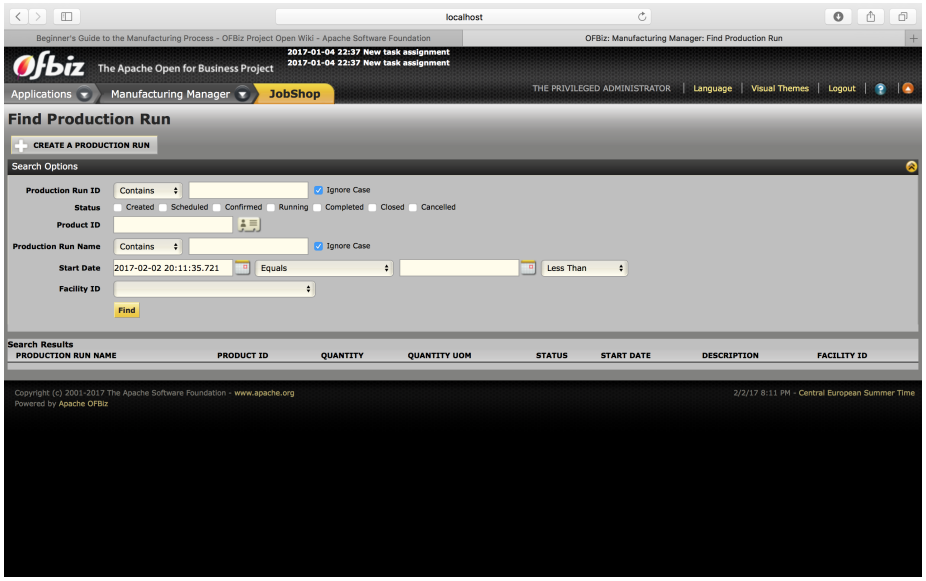
2.1 ProductionRun.java

Instead of directly looking into the code, we first examine the online ofbiz document to get information of this class. This class belongs to **Manufacturing** section. The link to the Online Documet.

The situation is described here. After a client makes order, configurable goods which our company provide require some type of manufacturing or production. If we do not have the requiring parts in our inventory, a production run is generated.



If we log into the ofbiz web application, we can examine the production run section. The ProductionRun class manages all the information of a certain production run activity.

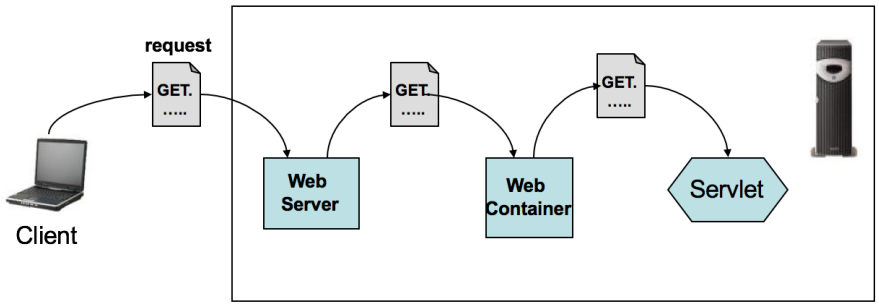


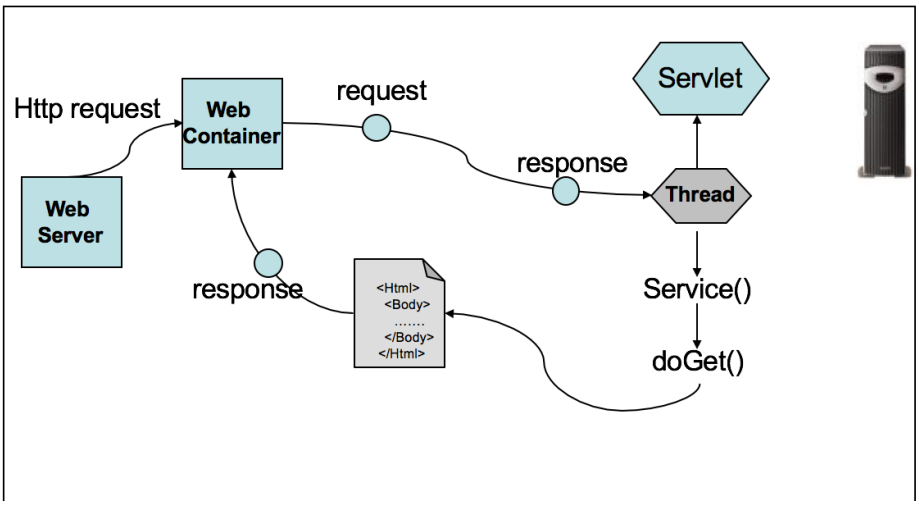
2.2 ViewerServeltRequest

By looking at the code, we find that ViewerservletRequest extends HttpServletRequestWrapper. A "HttpServletRequestWrapper" provides a convenient implementation of the HttpServletRequest interface that can be subclassed by developers wishing to adapt the request to a Servlet. Thus the role of this class is to represent a specific function of HttpServletRequest. More specifically, this function is getParameter();

Before looking into this function, let's recall what is a servlet. A servlet lives in a web container, and it is responsible for generating dynamic web contents. Servlet can be viewed as a special java class without main methods. After a client sends a HTTP request to the web server, the web container is responsible for :

- create an instance of a servlet
- call specific method of a servlet
- destroy a servlet





The web container knows which servlet to call because a servlet can have three names :

- Client knows URL name
- Deployer knows servlet secret internal name
- Actual java class name

The XML document is responsible for deployment.

```
<web-app>
 ……
 <servlet>
   <servlet-name>LoginServ</servlet-name>
    <servlet-class>com.Login</servlet-class>
  </servlet>

 <servlet-mapping>
   <servlet-name>LoginServ</servlet-name>
   <url-pattern>/Logon</url-pattern>
 </servlet-mapping>
 ……..
 ……..
</web-app>
```

Web.xml

Now let's look at what function role is this class. **ServletRequest** defines an object to provide client request information to a servlet. The servlet container creates a ServletRequest object and passes it as an argument to the servlet's service method. A **ServletRequest** object provides data including parameter name and values, attributes, and an input stream.
This java class file is used to form the parameter.

3 Check List

3.1 ProductionRun.java

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3.2 ViewerServletRequest

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3.2.15 Computation, Comparisons, and Assignments

3.2.16 Exceptions

1. The relevant exception is caught.

```
try {
reportFileUrl = FlexibleLocation.resolveLocation(reportParam, loader);
} catch (MalformedURLException e) {
Debug.logError(e, module);
}
if (reportFileUrl == null) {
throw new IllegalArgumentException("Could not resolve location to URL: "
+ reportParam);
}
```

The function in this code block tries to locate the file url. In case of wrong url and no file found, an exception is raised.

3.2.17 Flow of Control

No **switch** and **loop** in this file.

3.2.18 Files

This java class does not deal with file operations.